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CLAIMS

1. A needle protection device comprising:
  - a protector support (20) delimiting a passage for accepting a syringe body (4);
  - a needle protector (22) able to move with respect to the protector support (20) between a retracted position and a deployed position;
  - a compression spring (24) pressing between the protector support (20) and the needle protector (22); and
  - retaining means (38, 40, 54) for initially restraining the needle protector (22) against the action of the compressed spring (24), which means (38, 40; 54) can be released by moving the needle protector (22) with respect to the protector support (20) in a release direction, characterized in that it comprises mechanical immobilizing means (56) for immobilizing the needle protector (22) with respect to the protector support (20) in the release direction when no syringe body is present in the passage of the protector support, which mechanical immobilizing means (56) can be deactivated by engaging a syringe body (4) in the passage of the protector support (20).
- 25 2. The needle protection device as claimed in claim 1, characterized in that the mechanical immobilizing means comprise at least one hook (56) secured to a first element chosen from the protector (22) and the support (20), the or each hook being able to be moved between an immobilizing position in abutment against the second element chosen from the protector (22) and the support (20) when no syringe is present and a mobilizing position away from the second element chosen from the protector (22) and the support (20) when a syringe is present, the or each hook (56) having an actuating face (56B) actuated by the syringe body (4) as it is engaged in the passage of the support

(20) to move the hook (56) from its immobilizing position to its mobilizing position.

5       3. The needle protection device as claimed in claim 2, characterized in that the or each hook (56) has a protrusion projecting into the passage of the protector support (20) when the syringe body (4) is not present.

10      4. The needle protection device as claimed in any one of claims 2 and 3, characterized in that the or each hook (56) is secured to the needle protector (22).

15      5. The needle protection device as claimed in claim 4, characterized in that the or each hook (56) has a cam surface (56B) and the protector support (20) comprises at least one ramp (57) able to collaborate with the or each cam surface (56B) to cause the or each hook (56) to become effaced on the outside of the 20 protector support (20).

25      6. The needle protection device as claimed in any one of claims 2 to 5, characterized in that the protector support (20) comprises a distal surface (44B) able to collaborate with the or each hook (56) to keep the protector (20) in the deployed position.

30      7. An injection device comprising, on the one hand, a syringe (1) which comprises a needle (6), a tubular body (4) to the distal end of which a needle (6) is fixed, and an injection piston (8) slidably mounted in the body (4) and, on the other hand, a needle protection device (2) as claimed in any one of the preceding claims.